REMARKS/ARGUMENTS

Brief Summary of Status

Claims 1-84 are pending in the application.

Claims 1-6, 9, 11, 15, 16, 20-25, 27, 29-31, 35, 36, 38-40, 43, 47-51, 55-62, 65, 67-74, 77, and 79-82 are rejected.

Claims 7, 8, 10, 12, 13, 17-19, 26, 28, 32-34, 37, 41, 42, 44-46, 52-54, 64, 64, 66, 75, 76, 78, 83, and 84 are objected to.

35 U.S.C. § 103

The Examiner asserts:

"4. Claims 1, 2, 11, 16, 36, 48, 56, 57, 65, 69 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette (71847878) in view of Dress, Jr. et al (660381 8) hereafter Dress." (non-final office action, Part of Paper No./Mail Date 20080211, p. 2)

The Examiner asserts:

"5. Claims 9, 43, 62, 74 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, and in further view of Parry (7149529)." (non-final office action, Part of Paper No./Mail Date 20080211, p. 8)

The Examiner asserts:

"6. Claims 3-5, 49-51, 58-60 and 70-72 are rejected under 35 U .S.C. 103(a) as being unpatentable over Mallette in view of Dress, and further in view of the Official Notice." (non-final office action, Part of Paper No./Mail Date 20080211, p. 10)

The Examiner asserts:

"7. Claims 38, 39, 67, 68, 79 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, and further in view of the Official Notice." (non-final office action, Part of Paper No./Mail Date 20080211, p. 11)

The Examiner asserts:

"8. Claims 6, 15, 21, 22, 27, 31, 40, 61, 73 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, and in further view of Green et al (6697628) hereafter Green." (non-final office action, Part of Paper No./Mail Date 20080211, p. 11)

The Examiner asserts:

"9. Claims 23-25, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, in further view of Green, and further-in view of the Official Notice." (non-final office action, Part of Paper No./Mail Date 20080211, p. 18)

The Examiner asserts:

"10. Claims 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, in further view of Green, and further in view of Federal Communication Commission (FCC 02-48) here after FCC." (non-final office action, Part of Paper No./Mail Date 20080211, p. 19)

The Examiner asserts:

"11. Claims 20, 47 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, in further view of Federal Communication Commission (FCC 02-48) here after FCC." (non-final office action, Part of Paper No./Mail Date 20080211, p. 20)

Allowable Subject Matter

The Examiner asserts:

"12. Claims 7, 8, 10, 12, 13, 17-19, 26, 28, 32-34, 37, 41, 42, 44-46, 52-54, 63, 64, 66, 75, 76, 78, 83 and 84 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." (non-final office action, Part of Paper No./Mail Date 20080211, p. 21)

35 U.S.C. § 103

The Examiner asserts:

"4. Claims 1, 2, 11, 16, 36, 48, 56, 57, 65, 69 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette (71847878) in view of Dress, Jr. et al (660381 8) hereafter Dress." (non-final office action, Part of Paper No./Mail Date 20080211, p. 2)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The Examiner also asserts:

"For claim 1, 48 and 56, Mallette disclose a piconet that employs PN (Pseudo-Noise) codes (see column 5 lines 2-4, PN codes) to spread UWB (Ultra Wide Band) pulses to minimize narrowband interference (see column 4 lines 55-67, UWB and interference eliminated), the piconet comprising: a PNC (piconet coordinator) (see Figure 2 Box 206, wireless control concentrator); a plurality of DEVs (user piconet devices) (see Figure 2 box 200-205, wireless consoles);

wherein each DEV of the plurality of DEVs and the PNC is operable to communicate with one another using UWB pulses (see column 4 lines 15-49, devices communication wirelessly using UWB); wherein, based on narrowband interference within a spectrum of the UWB pulses that are transmitted across a communication link within the piconet, the PNC assigns a PN code from a plurality of PN codes to spread the UWB pulses transmitted across the communication link (see column 4 line 55 - column 5 line 17, interference is eliminated by the use UWB and PN codes); and wherein, when transmitting a UWB pulse across the communication link, at least one of a DEV of the plurality of DEVs and the PNC spreads the UWB pulse using the PN code that is assigned from the plurality of PN codes (see column 4 line 55 - column 5 line 17, UWB pulses are transmitted wirelessly using unique PN codes)." (non-final office action, Part of Paper No./Mail Date 20080206, p. 3, emphasis added)

The Examiner equates the Applicant's PNC with Mallette's "wireless control concentrator" such as depicted in "Figure 2 Box 206".

The Applicant respectfully believes that there is no teaching and disclosure within Mallette that such a "wireless control concentrator" assigns any PN code from a plurality

of PN codes to spread UWB pulses transmitted across the communication link based on narrowband interference within a spectrum of the UWB puses that are transmitted across the communication link within the piconet in accordance with the subject matter as claimed by the Applicant.

The only reference to "interference" whatsoever that the Applicant can find in Mallette is with respect to multi-path interference. For example, Mallette teaches and discloses:

"TM-UWB^{TM}

Wireless communication using the wireless protocol TM-UWB.TM. by the Time Domain Corporation requires no assigned spectrum of the wireless communication frequency because transmissions are pulse trains of individual ultra-wideband pulses sent at very precise time but varying intervals that resemble Morse code. This results in a very low average power transmission that creates a noise-like signal that can be used to transmit data, voice, and video communications. It can also be used as a tracking and positioning device as well as for radar. Because of the unique nature of TM-UWB.TM. signals, multipath interference is eliminated. This makes TM-UWB.TM. ideal for indoor communications use in crowded electrically noisy environments such as computer rooms. The pulse trains can be channelized to create a multiple access system. Pseudo-random noise codes (PN codes) are used to accomplish this. A TM-UWB.TM. system can have virtually an unlimited number of channel codes. Each user would have a unique PN code sequence and only receivers using the same PN code sequence can decode the transmission. This can make eavesdropping or spoofing extremely difficult. TM_UWB.TM. also has a built-in location and tracking mechanism that is utilized in the present invention by the concentrator to map itself and all the devices connected to it on a Cartesian coordinate space or map. This permits accuracy to sub-centimeter but for this application the accuracy will be less than six inches. This feature of TM-UWB.TM. also helps in registering a new device to a concentrator when it has to be dynamically added to the network." (Mallette, col. 4, line 55 to col. 5, line 17, emphasis added)

The only reference that the Applicant can find within Mallette to any interference whatsoever is with respect to "multipath interference" (i.e., not with respect to "narrowband interference").

The Applicant respectfully points out that "multipath interference" and "narrowband interference" (e.g., such as based on narrowband interference within a spectrum of the UWB pulses that are transmitted across a communication link within the piconet in accordance with the subject matter as claimed by the Applicant) are two different types of interference.

The on-line reference "Wikipedia" has a general description of multipath interference.

"**Multipath interference** is a phenomenon in the physics of waves whereby a wave from a source travels to a detector via two or more paths and, under the right condition, the two (or more) components of the wave interfere. The condition necessary is that the components of the wave remain coherent throughout the whole extent of their travel. The interference will arise owing to the two (or more) components of the wave having, in general, travelled a different length, and thus arriving at the detector out of phase with each other." (http://en.wikipedia.org/wiki/Multipath_interference, emphasis added)

Multipath interference can be generated when electromagnetic waves are transmitted from a source to a destination and some of those electromagnetic waves bounce off of objects (e.g., walls, objects, etc.) and reach the destination at different times that other of the electromagnetic waves.

Also within the on-line reference "Wikipedia", a general description of narrowband interference can be found.

"**Electromagnetic interference** (or **EMI**, also called **radio frequency interference** or **RFI**) is a (usually undesirable) disturbance that affects an electrical circuit due to electromagnetic radiation emitted from an external source." (http://en.wikipedia.org/wiki/Electromagnetic_interference, emphasis added)

Later on that same page of description, the following description is found:

"EMI or RFI may be broadly categorized into two types; narrowband and broadband. Narrowband interference usually arises from intentional transmissions such as radio and TV stations, pager transmitters, cell phones, etc. Broadband interference usually comes from incidental radio frequency emitters. These include electric power transmission lines, electric motors, thermostats, bug zappers, etc. Anywhere electrical

power is being turned off and on rapidly is a potential source. The spectra of these sources generally resembles that of synchrotron sources, stronger at low frequencies and diminishing at higher frequencies, though this noise is often modulated, or varied, by the creating device in some way. Included in this category are computers and other digital equipment as well as televisions. The rich harmonic content of these devices means that they can interfere over a very broad spectrum. Characteristic of broadband RFI is an inability to filter it effectively once it has entered the receiver chain. [2][3] [4] Figure alongside shows various EMI sources and their classification based on electromagnetic spectrum." (http://en.wikipedia.org/wiki/Electromagnetic_interference, emphasis added)

Moreover, when referring to the characteristics of "narrowband interference" (in the context of Code Division Multiple Access (CDMA)), the following may be found:

"CDMA can also effectively reject narrowband interference. Since narrowband interference effects only a small portion of the spread spectrum signal, it can easily be removed through notch filtering without much loss of information." (http://en.wikipedia.org/wiki/CDMA, emphasis added)

Therefore, the Applicant respectfully points out that "multipath interference" and "narrowband interference" are in fact two different types of interferences.

The Applicant respectfully points out that Mallette does not appear to employ assign any PN code from a plurality of PN codes to spread the UWB pulses transmitted across the communication link based on any narrowband interference within a spectrum of the UWB pulses that are transmitted across a communication link within the piconet in accordance with the subject matter as claimed by the Applicant.

Mallette teaches and discloses that "Because of the unique nature of TM-UWB.TM. signals, multipath interference is eliminated". The Applicant respectfully believes that Mallette does not teach and disclose any selection of one particular type of PN code, from among a plurality of PN codes, based on any "narrowband interference" whatsoever.

Moreover, the Applicant respectfully believes that Mallette does not teach and disclose any assigning of a PN code from a plurality of PN codes to spread the UWB pulses transmitted across the communication link based on any narrowband interference within a spectrum of the UWB pulses that are transmitted across a communication link

within the piconet in accordance with the subject matter as claimed by the Applicant (emphasis added).

Also, as mentioned above the Examiner equates the Applicant's PNC with Mallette's "wireless control concentrator" such as depicted in "Figure 2 Box 206".

Since there appears to be no teaching and disclosure within Mallette of any assigning of a PN code from a plurality of PN codes to spread the UWB pulses transmitted across the communication link based on any narrowband interference within a spectrum of the UWB pulses that are transmitted across a communication link within the piconet in accordance with the subject matter as claimed by the Applicant (emphasis added), then the Applicant respectfully believes that it is clear that Mallette's "wireless control concentrator" such as depicted in "Figure 2 Box 206" also does not assign a PN code from a plurality of PN codes to spread the UWB pulses transmitted across the communication link based on any narrowband interference within a spectrum of the UWB pulses that are transmitted across a communication link within the piconet in accordance with the subject matter as claimed by the Applicant (emphasis added).

In fact, the Applicant respectfully believes that Mallette's "wireless control concentrator" such as depicted in "Figure 2 Box 206" employs the PN codes therein "for verified device consoles/control ports locations".

For example, with respect to the use of "a unique PN code sequence", Mallette teaches and discloses that "Each user would have a unique PN code sequence and only receivers using the same PN code sequence can decode the transmission" (as cited above as well).

Within Mallette's claim 1, Mallette claims:

"1. A method for a console/control concentrator to communicate via a wireless connection with a plurality of device consoles/control ports comprising:

registering said plurality of device consoles/control ports based on their physical location as determined by said console/control concentrator based on location information collected by said device consoles/control ports from reference stations;

adapting said device consoles/control ports to handle said wireless communication; and

emulating a concentrator by utilizing a computer equipped with a transceiver and concentrator emulation application utilizing a Time Modulated--Ultra Bandwidth wireless protocol,

wherein said console/control concentrator provides for verified device consoles/control ports locations using PLT by tri-lateralation, reference stations, and pseudo-random noise codes." (Mallette, col. 7, lines 2-18, claim 1, emphasis added)

In Mallette's claim 1, it appears that "said console/control concentrator provides for verified device consoles/control ports locations using", among other things, "pseudo-random noise codes".

The only reference to PN code or "pseudo-random noise codes" in the written description of Mallette is within the portion of col. 4, line 55 to col. 5, line 17.

It appears that the Mallette's use of "pseudo-random noise codes" by the "console/control concentrator" is to provide "for verified device consoles/control ports locations" (e.g., see Mallette's claim 1).

The "console/control concentrator" of Mallette (e.g., Mallette's "wireless control concentrator" such as depicted in "Figure 2 Box 206") does not appear to assign any "pseudo-random noise codes" based on narrowband interference within a spectrum of the UWB pulses that are transmitted across a communication link within the piconet in accordance with the subject matter as claimed by the Applicant.

As such, the Applicant respectfully believes that Mallette is deficient with respect to teaching and disclosure the Applicant's claim limitations that the Examiner identifies.

The Applicant respectfully traverses that Examiner's assertion that "Mallette teaches all the limitations of the claimed invention except wherein the assigned PN code has at least one narrowband blocking interval that substantially nulls at least one portion of the spectrum of the UWB pulses around which the narrowband interference issubstantially centered thereby substantially eliminating the narrowband interference." (non-final office action, Part of Paper No./Mail Date 20080206, p. 4, emphasis added)

The Applicant also respectfully believes that Mallette fails to teache and disclose all of the subject matter limitations that the Examiner identifies as being in accordance with the teaching and disclosure of Mallette in view of at least the Applicant's comments provided above.

The Examiner also asserts:

"Dress from the same or similar fields of endeavor teaches wherein the assigned PN code has at least one narrowband blocking interval that substantially nulls at least one portion of the spectrum of the UWB pulses around which the narrowband interference is substantially centered thereby substantially eliminating the narrowband interference (see column 11 lines 41-51, the wideband filter reject bands which would eliminate outside interference)." (non-final office action, Part of Paper No./Mail Date 20080206, p. 4, emphasis added)

The Examiner-cited portion of Dress teaches and discloses:

"FIG. 14 shows a wideband or ultra-wideband (UWB) receiver for implementing an embodiment of the invention corresponding to the previous transmitters of FIGS. 12 and 13. A broadband radio frequency signal from a receiving antenna 1400 is bandpass-filtered by a wideband filter/low-noise amp 1410 to admit the desired frequency range and simultaneously reject out-of-band signals and interference. Appropriate Gaussian pulse-shaping and/or equalization may also be performed by the wideband filter/low-noise amp 1410. The following low-noise, front-end amplifier (LNA) then boosts the signal amplitude to a useful level." (Dress, col. 11, line 41-51, emphasis added)

The Applicant respectfully believes that the filtering, as within this Examiner-cited portion of Dress, would not address the narrowband interference that resides within the very frequency spectrum of interest (e.g., see Applicant's claim 1: "narrowband interference within a spectrum of the UWB pulses that are transmitted across a communication link within the piconet").

The "narrowband interference", as in accordance with the subject matter as claimed by the Applicant, is actually "within a spectrum of the UWB pulses that are transmitted across a communication link within the piconet".

The filtering of Dress is operable "to admit the desired frequency range and simultaneously reject out-of-band signals and interference". The filtering of Dress would not address undesired frequency content within the "desired frequency range". The only rejection of any signal in accordance with the filtering of Dress is with respect to the "out-of-band signals and interference".

The Applicant is unsure how the filtering in this Examiner-cited portion Dress would deal with undesirable content within the actual "desired frequency range". The Applicant respectfully believes that "bandpass" generally allows frequency content to be passed when that frequency content is in between upper and lower frequency bounds (e.g., hence the terminology "bandpass").

For clearer understanding of the context of the Examiner-cited portion of Dress, the Applicant also provides the portion immediately following the Examiner-cited portion of Dress, which teaches and discloses:

"An integral automatic gain-control (AGC) loop 1420 that includes a peak detector 1430 regulates the LNA's output to accommodate both high and low input-signal levels while maintaining good amplifier linearity. The LNA output also drives a synchronization-trigger detector circuit 1440 which is used to start the synchronization process in the downstream portion of the receiver system. Typically, a sync burst or preamble (or perhaps a specially configured data sequence) will be transmitted at or near the beginning of each data block to facilitate rapid synchronization and acquisition of the data stream in the receiver, although this is not absolutely mandatory. If a valid trigger signal is detected, the pulse is gated by a gate 1450 through to a correlator 1460. The correlator 1460 circuit performs the template-matching of the incoming Gaussian pulse stream with the selected-order pulse shape. The output from the correlator 1460 then drives the following data demodulator/decoder 1465 to secure the desired output data stream. Additional signal tracking and synchronization are handled by a combination of a feedforward phase-lock synchronizer driven by the correlator output and a feedback locking path derived from the final received data bitstream. The combined outputs drive a variable-frequency clock 1480, which in turn, regulates the readout rate of a PN generator 1490, thus acquiring (and maintaining) lock with the local PN sequence in time and phase to the incoming PN chipstream arriving from the transmitter. Thus, FIG. 14 shows a receiver block diagram with synchronization and demodulation details." (Dress, col. 11, line 51 to col. 12, line 14, emphasis added)

The Applicant respectfully believes that even this portion of Dress does not teach and disclose any characteristic of the PN codes (e.g., as employed by the "PN generator 1490") such that the PN code has at least one narrowband blocking interval that

substantially nulls at least one portion of the spectrum of the UWB pulses around which the narrowband interference is substantially centered thereby substantially eliminating the narrowband interference in accordance with the subject matter as claimed by the Applicant.

It is also noted that, when considering FIG. 14 of Dress, the filtering performed therein (e.g., by the "wideband filter/low-noise amp 1410") is located well before the "PN generator 1490". As such, the Applicant respectfully believes that it is in fact the "wideband filter/low-noise amp 1410" of FIG. 14 of Dress that performs the filtering therein and not any assigned PN code, as generated by the "PN generator 1490" of FIG. 14 of Dress that performs any filtering. The Applicant also respectfully believes that the filtering as performed by the "wideband filter/low-noise amp 1410" of FIG. 14 of Dress does not perform filtering in accordance with the subject matter as claimed by the Applicant (e.g., by including "at least one narrowband blocking interval that substantially nulls at least one portion of the spectrum of the UWB pulses around which the narrowband interference is substantially centered thereby substantially eliminating the narrowband interference").

Moreover, the Applicant respectfully believes that no PN code, as generated by the "PN generator 1490" of FIG. 14 of Dress, has at least one narrowband blocking interval that substantially nulls at least one portion of the spectrum of the UWB pulses around which the narrowband interference is substantially centered thereby substantially eliminating the narrowband interference in accordance with the subject matter as claimed by the Applicant.

The Examiner explicitly describes the filtering of Dress as "the wideband filter reject bands which would eliminate outside interference", and the Applicant respectfully believes that the narrowband interference, in accordance with the subject matter as claimed by the Applicant, is actually "within a spectrum of the UWB pulses that are transmitted across a communication link within the piconet". As such, the Applicant respectfully believes that it is clear that the filtering in accordance with the teaching and disclosure of the Examiner-cited portion of Dress would not address the "narrowband interference within a spectrum of the UWB pulses that are transmitted across a

communication link within the piconet" in accordance with the subject matter as claimed by the Applicant.

The Applicant also respectfully believes that the filtering in accordance with the teaching and disclosure of the Examiner-cited portion of Dress is not effectuated using an "assigned PN code has at least one narrowband blocking interval that substantially nulls at least one portion of the spectrum of the UWB pulses around which the narrowband interference is substantially centered thereby substantially eliminating the narrowband interference".

These comments made above are also applicable to other of the Applicant's independent claims rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Mallette in view of Dress.

The Applicant respectfully asserts that Mallette, and Dress, when considered individually or together, fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant in these claims.

In view of at least these comments made above, the Applicant respectfully believes that these independent claims rejected above are patentable over Mallette in view of Dress.

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 103(a) as being unpatentable over Mallette in view of Dress.

The Examiner asserts:

"5. Claims 9, 43, 62, 74 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, and in further view of Parry (7149529)." (non-final office action, Part of Paper No./Mail Date 20080211, p. 8)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Mallette and/or Dress are also applicable here.

The Applicant respectfully believes that the inclusion of Parry fails to overcome the deficiencies of Mallette in view of Dress.

The Applicant respectfully asserts that Mallette, Dress, and Parry, when considered individually or together, fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant in these claims.

In view of at least these comments made above, the Applicant also respectfully believes that the independent claims from which these dependent claims depend are allowable over Mallette in view of Dress, and in further view of Parry.

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 103(a) as being unpatentable over Mallette in view of Dress, and in further view of Parry.

The Examiner asserts:

"6. Claims 3-5, 49-51, 58-60 and 70-72 are rejected under 35 U .S.C. 103(a) as being unpatentable over Mallette in view of Dress, and further in view of the Official Notice." (non-final office action, Part of Paper No./Mail Date 20080211, p. 10)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Mallette and/or Dress are also applicable here.

The Applicant respectfully believes that the inclusion of the Examiner's "Official Notice" fails to overcome the deficiencies of Mallette in view of Dress.

The Applicant respectfully asserts that Mallette, Dress, and the Examiner's "Official Notice", when considered individually or together, fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant in these claims.

In view of at least these comments made above, the Applicant also respectfully believes that the independent claims from which these dependent claims depend are allowable over Mallette in view of Dress, and in further view of the Examiner's "Official Notice".

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 103(a) as being unpatentable over Mallette in view of Dress, and in further view of the Examiner's "Official Notice".

The Examiner asserts:

"7. Claims 38, 39, 67, 68, 79 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, and further in view of the Official Notice." (non-final office action, Part of Paper No./Mail Date 20080211, p. 11)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Mallette and/or Dress are also applicable here.

The Applicant respectfully believes that the inclusion of the Examiner's "Official Notice" fails to overcome the deficiencies of Mallette in view of Dress.

The Applicant respectfully asserts that Mallette, Dress, and the Examiner's "Official Notice", when considered individually or together, fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant in these claims.

In view of at least these comments made above, the Applicant also respectfully believes that the independent claims from which these dependent claims depend are allowable over Mallette in view of Dress, and in further view of the Examiner's "Official Notice".

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 103(a) as being unpatentable over Mallette in view of Dress, and in further view of the Examiner's "Official Notice".

The Examiner asserts:

"8. Claims 6, 15, 21, 22, 27, 31, 40, 61, 73 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, and in further view of Green et al (6697628) hereafter Green." (non-final office action, Part of Paper No./Mail Date 20080211, p. 11)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Mallette and/or Dress are also applicable here.

The Applicant respectfully believes that the inclusion of Green fails to overcome the deficiencies of Mallette in view of Dress.

The Applicant respectfully believes that independent claim 21 is allowable over Mallette in view of Dress, and in further view of the Green.

The Applicant respectfully asserts that Mallette, Dress, and Green, when considered individually or together, fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant in these claims.

In view of at least these comments made above, the Applicant also respectfully believes that the independent claims from which these dependent claims depend are allowable over Mallette in view of Dress, and in further view of Green.

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 103(a) as being unpatentable over Mallette in view of Dress, and in further view of the Green.

The Examiner asserts:

"9. Claims 23-25, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, in further view of Green, and further in view of the Official Notice." (non-final office action, Part of Paper No./Mail Date 20080211, p. 18)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Mallette and/or Dress are also applicable here.

The Applicant respectfully believes that the inclusion of Green and the Examiner's "Official Notice" fails to overcome the deficiencies of Mallette in view of Dress.

The Applicant respectfully asserts that Mallette, Dress, Green, and the Examiner's "Official Notice", when considered individually or together, fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant in these claims.

In view of at least these comments made above, the Applicant also respectfully believes that the independent claims from which these dependent claims depend are allowable over Mallette in view of Dress, in further view of Green, and further in view of the Examiner's "Official Notice".

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 103(a) as being unpatentable over Mallette in view of Dress, in further view of Green, and further in view of the Examiner's "Official Notice".

The Examiner asserts:

"10. Claims 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, in further view of Green, and further in view of Federal Communication Commission (FCC 02-48) here after FCC." (non-final office action, Part of Paper No./Mail Date 20080211, p. 19)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Mallette and/or Dress are also applicable here.

The Applicant respectfully believes that the inclusion of Green and FCC fails to overcome the deficiencies of Mallette in view of Dress.

The Applicant respectfully asserts that Mallette, Dress, Green, and FCC, when considered individually or together, fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant in these claims.

In view of at least these comments made above, the Applicant also respectfully believes that the independent claims from which these dependent claims depend are allowable over Mallette in view of Dress, in further view of Green, and further in view of FCC.

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 103(a) as being unpatentable over Mallette in view of Dress, in further view of Green, and further in view of FCC.

The Examiner asserts:

"11. Claims 20, 47 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallette in view of Dress, in further view of Federal Communication Commission (FCC 02-48) here after FCC." (non-final office action, Part of Paper No./Mail Date 20080211, p. 20)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Mallette and/or Dress are also applicable here.

The Applicant respectfully believes that the inclusion of FCC fails to overcome the deficiencies of Mallette in view of Dress.

The Applicant respectfully asserts that Mallette, Dress, and FCC, when considered individually or together, fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant in these claims.

In view of at least these comments made above, the Applicant also respectfully believes that the independent claims from which these dependent claims depend are allowable over Mallette in view of Dress, and further in view of FCC.

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 103(a) as being unpatentable over Mallette in view of Dress, and further in view of FCC.

Allowable Subject Matter

The Examiner asserts:

"12. Claims 7, 8, 10, 12, 13, 17-19, 26, 28, 32-34, 37, 41, 42, 44-46, 52-54, 63, 64, 66, 75, 76, 78, 83 and 84 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." (non-final office action, Part of Paper No./Mail Date 20080211, p. 21)

The Applicant respectfully agrees that the subject matter of these claims is allowable.

However, the Applicant respectfully traverses the objections to these claims.

In view of at least the comments submitted herewith, the Applicant respectfully believes that independent claims 1, 21, 36, 48, 56, 69, and 77 are allowable.

The Applicant respectfully believes that these dependent claims objected to above, being further limitations of the subject matter as claimed in allowable independent claims, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the objections to these claims.

The Applicant respectfully believes that claims 1-84 are in condition for allowance and respectfully requests that they be passed to allowance.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present U.S. utility patent application.

RESPECTFULLY SUBMITTED,

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